

Title (en)  
METHOD FOR FIXED POINT STABILISATION OF A SUBMARINE VEHICLE

Title (de)  
VERFAHREN ZUR STABILISIERUNG EINES UNTERWASSERFAHRZEUGS AN EINEM FIXPUNKT

Title (fr)  
PROCEDE DE STABILISATION AU POINT FIXE D'UN VEHICULE SOUS-MARIN

Publication  
**EP 1151362 B1 20021113 (FR)**

Application  
**EP 00906432 A 20000218**

Priority  
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• FR 9902107 A 19990219

Abstract (en)  
[origin: FR2790099A1] Maximum correlation is sought between a first variable delta representing the horizontal displacement of the submarine and a second variable delta 2 representing its depth. The submarine navigation is controlled using the values obtained and correlations are made on time periods DELTA t taken successively on the echo signal between the start of reception and the start of emission of the next recurrence. The submarine has a two dimensional sonar antenna (103) emitting sonar signals towards the seabed with a set recurrence. Echo signals from the seabed are received on the antenna from the emitted signals and are correlated at each recurrence with those from the first recurrence which are taken as reference signals. The signals emitted on a series of n recurrences are codes by disjointed codes, emission is produced at a speed n times faster than that needed to emit a single code and the correlation of each code is done during the emission of others. To reduce the number of calculations needed to obtain a correct result the altitude of the submarine is determined using a separate detector to limit the amplitude of variation in vertical displacement to be taken into account in the calculations.

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